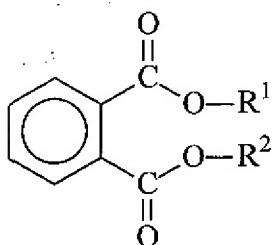


REMARKS

Responsive to the Office action mailed January 8, 2009, applicant requests entry of the foregoing amendments, consideration of the following remarks and reconsideration of the rejections set forth in said office action. Claims 1 and 7 have been amended.

The present invention is directed towards a step wise process for the treatment of a metal hydrotreating catalyst in oxide form, in which the first step consists of bringing it into contacting with a metal hydrotreating catalyst, in the absence of a sulphidation agent, at least one compound chosen from orthophthalic acid, phthalic anhydride or the ester of general formula (I):



in which the symbols R¹ and R², which are identical or different, each represent an alkyl (linear or branched), cycloalkyl, aryl, alkylaryl or arylalkyl radical, it being possible for this radical to comprise from 1 to 18 carbon atoms and optionally one or more heteroatoms. The contacting operation can be carried out by spraying the compound, in the liquid state, over a charge of the catalyst to be treated by any appropriate device, for example a double-cone mixer or a rotary mixer. The compound can be sprayed after it has been dissolved in a solvent with a boiling point of less than 200°C, preferably of less than 180°C, so that the solvent can be evaporated by heating. The solvent can be an organic solvent, such as aliphatic, aromatic or alicyclic hydrocarbons, or alcohols, ethers or ketones. The compound can also be sprayed after it has been emulsified in water by any appropriate dispersing or emulsifying agent. Thereafter, a sulphiding agent such as an organic polysulphide, preferably dimethyl

disulphide is used to sulphide the catalyst. It was discovered that this sequential treatment results in a hydrotreating catalyst exhibiting improved activity.

Claims 1-5 and 13 were rejected under 35 USC 102(b) as being anticipated by Brun et al. (US 6,325,930). Applicants submit that Brun et al. '920 fails to anticipate the claims as currently amended.

Brun et al. '925 discloses a process for the sulphurization of catalyst for the hydrotreating of hydrocarbon feedstocks in which a small amount of at least one orthophthalic acid ester is **added to the sulphurization agent** used to sulphurize the catalyst. Brun et al. '925 abstract, emphasis added. Thus, Brun et al. '925 fails to anticipate the present invention wherein a compound selected from an orthophthalic acid, phthalic anhydride or the ester of the disclosed formula is used to treat the catalyst, in the absence of a sulphidation agent. In the present invention, the catalyst is first treated with the orthophthalic acid, phthalic anhydride or the ester of the disclosed formula and thereafter the so treated catalyst is sulphurized with a sulphidation agent. Applicants submit that Brun et al. '925 fails to disclose or render obvious this sequential treatment method.

The examples in the present application show that this sequential treatment of the present invention provides a hydrotreating catalyst exhibiting improved performance. See for example the results of comparative example 1 where DMDS sulphidation agent was applied in combination with SRGO (containing 1.1 wt % sulphur) and the relative volumic activity (RVA) of the so treated catalyst was 100%. In examples 2 and 3 (in accordance with the present invention) a catalyst was first treated with DEP in toluene. Thereafter, the so treated catalyst was sulphidized with DMDS sulphidation agent. The RVA of a catalyst so treated was 116%. Thus, the sequential treatment of the present invention provided a significant improvement in catalyst activity. Brun et al. '925 fails to anticipate the present invention because it fails to disclose the sequential treatment method of the present invention which provides catalyst which exhibit improved volumic activity.

Claims 1-6 and 7-15 were rejected under 35 USC 103(a) as being unpatentable over Brun (US6,325,920). Applicants submit that Brun '920 fails to render obvious the present invention.

As discussed above, Brun et al. '920 discloses a process for sulphurization of a hydrotreating catalyst wherein orthophthalic acid ester is added to the sulphurization agent used to sulphurize the catalyst. Brun et al. '920 directs a person skilled in the art that the orthophthalic acid ester is added to a sulphurization agent and the mixture/combination is used for sulphurization of catalysts. See column 3, lines 58-60. Applicants submit that Brun et al. '920 fails to provide any teaching, either express or by implication, of a method for sulphidation of catalysts comprising a sequential treatment first with an orthophthalic acid, phthalic anhydride or the ester thereafter, followed by treatment with a sulphidation agent as claimed in the present invention.

The examples in the present application clearly show the increased volumic activity provided by a catalyst treated with the sequential method of the present invention in comparison to a catalyst treated with the process disclosed by Brun et al. '920.

Claim 6 was rejected under 35 USC 103(a) as being unpatentable over Brun et al. '925 in view of Dufresne (US 6,077,803). Applicants respectfully submit the Brun et al. '925 read in view of Dufresne '803 fails to render obvious the present invention. As discussed above, Brun et al. '925 fails to disclose the sequential treatment method of the present invention. Applicants submit that Dufresne et al. '803 similarly fails to disclose the sequential treatment method of the present invention, thus a combination of Brun et al. '920 and Dufresne '803 fails to render obvious the process of the present invention.

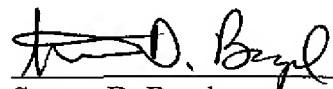
Dufresne et al. '803 discloses a process for presulfurizing a refining catalyst or petrochemical catalyst with a liquid elementary sulphur or elementary sulphur dissolved in a liquid. Dufresne et al. '803 discloses the application of a stabilizing agent along with or before the presulfurizing, sulphur containing agent. The stabilizing agent can be applied alone or in a solvent. The stabilizing agent is selected from the group that consists of alcohols, polyalcohols, mercaptans, and polymercaptans, as well as from among compounds such as aldehydes, ketones, polyketones, ethers, acids (particularly unsaturated, polyunsaturated, saturated fatty acids), polyacids and esters. Applicants submit that Dufresne et al. '803 fails to disclose the use of an orthophthalic acid, phthalic anhydride or the ester of the disclosed formula to treat a hydrotreating catalyst before the treatment with a sulphidation agent.

Applicant submit that even were it obvious to combine Brun et al. '920 with Dufresne et al. '803, the sequential process of the present invention which provides for enhanced catalyst activity is not disclosed.

In view of the foregoing remarks, applicant respectfully submits that claims 1-15 of the present application are in condition for allowance and prompt favorable action is solicited.

Respectfully submitted,

Date: March 26, 2009



Steven D. Boyd
Attorney of Record
Reg. No. 31,000
(215) 419-5270
Customer Number 31684